



Automation, DevOps, and the Demands of a Multicloud World

An IDC InfoBrief, *Sponsored by Red Hat* | **March 2018**



ANALYZE
THE FUTURE
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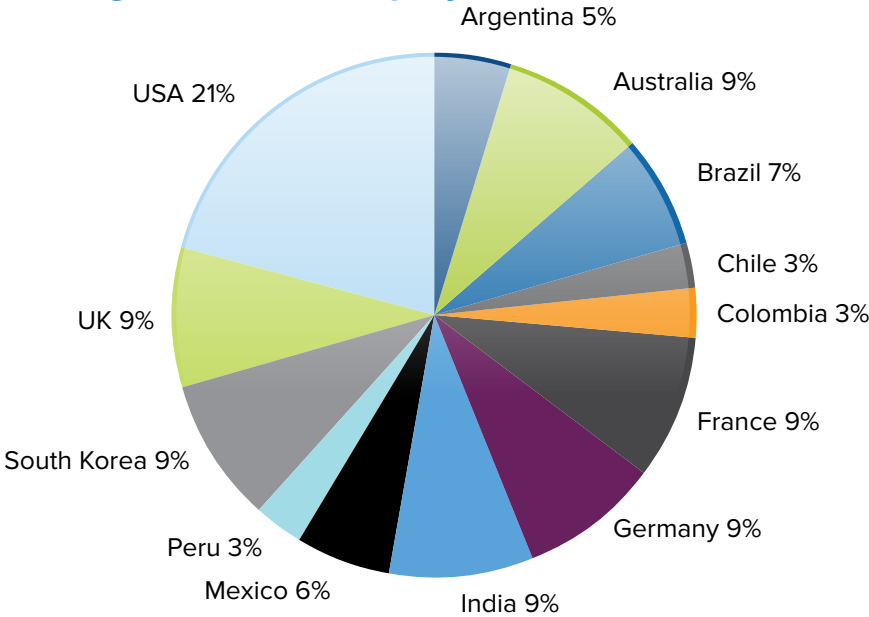
Methodology

In September, 2017 IDC conducted a global study to assess how enterprise IT management and automation strategies are evolving due to the impact of cloud computing, DevOps and digital transformation initiatives.

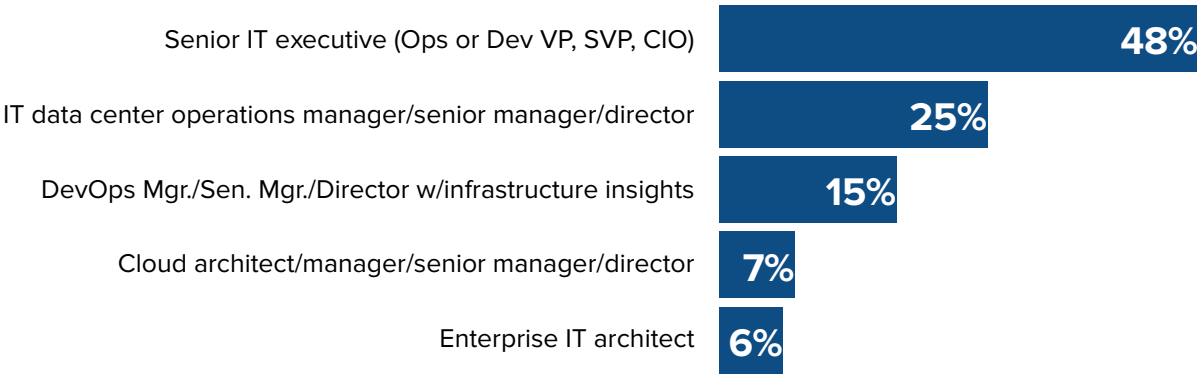
Respondents were IT operations decision makers with influence over their organization’s IT infrastructure architecture, management and modernization strategies including experience with or interest in DevOps and Linux.

This InfoBrief Summarizes the key findings from this study.

Q. In which country are the majority of your organization’s employees located?



Q. Which best describes your role?



What is DevOps?

DevOps represents the integration of **application development** and **IT operations** at many levels including culture, process workflows, and infrastructure management, as well as application creation, deployment, and delivery.

DevOps represents a **faster, more agile approach** to conceptualizing business innovation and driving those ideas or processes into customer- and user accessible code — whether delivered as packaged software, mobile and web apps, or online business services.

An organization adhering to DevOps embraces **a collaborative, business-centric approach** to development that values tight links between business decision makers, application development staff, IT operations and infrastructure managers.



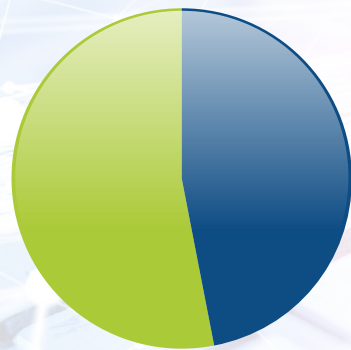
100% of enterprises worldwide are investing in or evaluating DevOps to achieve faster business innovation and agility

#1 DevOps Driver today: Faster Business Innovation

Current Enterprise Application Architectures

53%

Traditional: optimized for client-server computing and/or mainframes, running on physical or virtual platforms



47%

Cloud native: optimized for VMs or containers running on public and/or private cloud infrastructure.

35% OF ENTERPRISE APPLICATIONS DEVELOPMENT PROJECTS EXPECTED TO USE DEVOPS BY 2020

DevOps Means Faster, More Frequent Change

DevOps Impact on Individual Applications

48%

Percentage of organizations updating individual applications every 6 months or less frequently prior to using DevOps



65%

Percentage of organizations updating individual applications every 3 months or more frequently after using DevOps

Top DevOps Impacts on IT Operations

- Faster & more frequent code changes
- More dynamic infrastructure usage
- Traditional management strategies won't scale
- Automation required

Automation Required to Keep Up with DevOps Driven Change



85%

Percentage stating automation is mission critical or very important for DevOps strategy

Most important attributes of automation for cloud & DevOps

- Ability to keep up with constant DevOps code changes
- Ability to continuously scale and grow environment
- Ability to take advantage of open source innovation

Frequency of change

Predictability of change

N=1171 IT Operations Decision Makers
Source: IDC Next Generation IT Infrastructure & Management Survey

DevOps Workloads Will Run in Multicloud Environments

86% AUTOMATION IS EITHER MISSION CRITICAL OR VERY IMPORTANT TO THEIR FUTURE CLOUD STRATEGY

77%

SEE PUBLIC CLOUD IAAS AS A PRIMARY PLATFORM FOR NEW APPLICATIONS

5

The average number of clouds (public and private) that enterprises expect to use by 2020



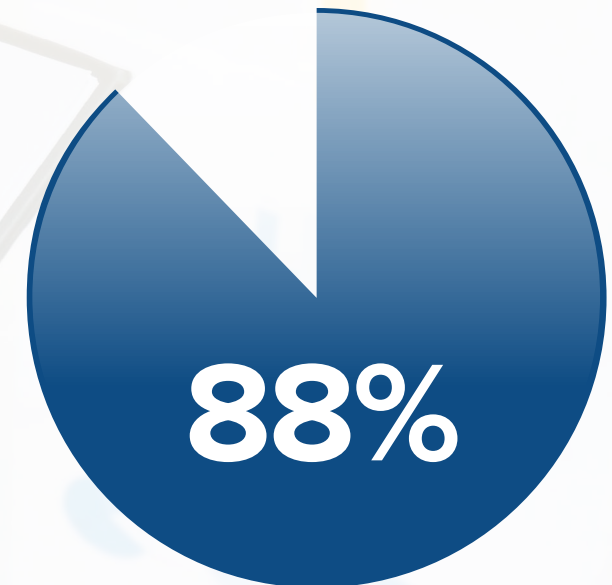
Infrastructure Agility Is Critical To DevOps Success



79%

OF IT ORGANIZATIONS WILL NEED TO DEPLOY NEW MANAGEMENT AND AUTOMATION SOFTWARE BETWEEN NOW AND 2020

91% SAY INFRASTRUCTURE SCALABILITY & AGILITY IS MISSION CRITICAL OR VERY IMPORTANT TO THE SUCCESS OF DEVOPS AND CLOUD NATIVE APPLICATION STRATEGIES



Open Source Provides Critical Innovation

VENDOR SUPPORTED OPEN SOURCE IS RANKED AS
#1 SOURCING PREFERENCE FOR NEW IT INFRASTRUCTURE

38%

OF TODAY'S APPLICATIONS
RUN ON LINUX

84%

believe open source is mission
critical or very important for
supporting IT strategies over
next 3 years



Automation Enables Successful DevOps, Improves Operational Agility, and Enables IT Innovation

#1

Reason Enterprises Cite for Deploying Net New Management & Automation:

“DevOps Requires Modern Automation”



#1 CRITERIA for Evaluating New IT Infrastructure, Including Cloud

“Ability to Improve Operational Agility”

#1

Expected impact in improving business and IT:

“Allow IT to develop, deploy and innovate faster”

Integrated, Automated Management For Traditional IT, Cloud & DevOps: A Winning Combination

